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THE
PLOTTER

**CLACKAMAS
COMPUTER
APPLIED
TRAINING
SOCIETY**

THE

PLOTTER

COMPUTING THE FUTURE--
IN CLACKAMAS COUNTY

EDITED BY: DICK WAGNER
CHAIRMAN: JACK ARMSTRONG
V/CHAIRMAN: BILL DUNLOP
SECRETARY: DICK WAGNER
TREASURER: ROD GOWEN
PR OFFICER: BOB EVANS
LIBRARIANS: BILL DUNLOP
                  ALICE DUNLOP

MEETING

The OCTOBER meeting will be:

on: SAT., OCTOBER 17 1992

MEETING   open at: 1:00 P.M.
in: COMMUNITY ROOM
    FAR WEST FEDERAL BANK
    OREGON CITY SHOPPING CENTER

WHAT YOU WILL FIND IN THIS ISSUE:
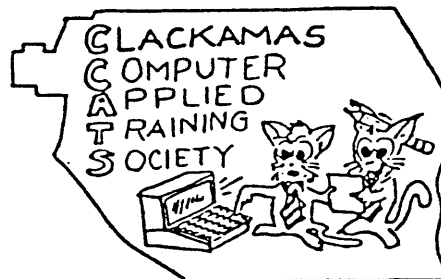
FROM THE EDITOR'S DESK

There was no official meeting as our September meeting was attended by only a few members.

Our October meeting is on the 17th, Saturday at 1 PM. This will be a meeting to work on page assemblies. Rod will have prenumbered pages back-to-back so paste-ups can be positioned in the propper sequence.

This issue has a construction article for reclaiming the nice cases used with Amdek 3 inch drives. Looks like a good idea to recoup part of the Amdek drives cost. RMG Enterprises has a good description for doing the change to 3 1/2 inch drives.

For the curious, Rod Gowen's article was printed on a Citizen printer, using his MSDOS type computer and a screen dump program called MPMPRINT. This program runs the printer in graphic mode. For those users who have not used the IBM screen print, it will handle only ASCII characters. This requires a program to properly produce graphic shapes.

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One possible improvement in using this program is to specify uni-direction in place of bidirection for the printing head. Unidirection will start all printing from the left side which produces a smoother vertical line.

Our short program this month is from WIDJUP. It will be of interest to users of Oliger disk systems. It will display 8 tests of the disk speed in RPMs. It also cleverly plots the 8 tests on a kind of a graph.

The listing was made with conventional Oliger LLIST. Line feed, line length and left margin were poked into the program after LET /P=0. To print the test results a SCREEN$ save was made. This was imported into Jack Dohamy's GYPSY program for producing the screen dump. Proper selection of the variables produced a printed image of a suitable width and length.

I have mentioned the advantages of GYPSY before. There are 12 variables to select, including the type of drive, left margin, line length, line feed, number of lines to print, horizontal scale, vertical scale, desnsity, to name some of the variabled. All variables are based on the Epson type printer but Jack can program for other printers.

The graph on the front page of our newsletter is printed from a SCREEN$ imported into GYPSY. This is printed with a left margin of 42 on the front page. An important part of the design is that the diagonal lines print at 45 degrees. This can be accomplished with a 2040 printer but that is rather poor quality that requires a paste-up.

I recently pyrchased 2 old computer magazines (1983-4) called Softalk for the IBM Personal Computer. These magazines are filled with ads of unknown companies. Makes a person wonder what the business failure rate has been over the years. Probably comparable to companies we have watched leave the Timex computer world.

BITS & BYTES
by: Rod Gowen

In this column I try to bring you the latest and complete information and news available to me regarding the world of TS computing. One way that I can accomplish this is if I have the support of you, the reader, in collecting news that may be of interest to other readers. If you have any news, rumors or other tidbits of information that fits this description, why not send it along? We will be watching!

HELP OUT AN OLD FRIEND-----
An old friend of QL users everywhere would like your help in finding some back issues of QL WORLD USER MAGAZINE. The issues he is looking for are as follows:

ANY ISSUES BEFORE 1985
JANUARY   1985
MARCH   1985
OCTOBER   1990
NOVEMBER   1990
MARCH   1992

If you think that you may be of service, please write to:

MICHAEL DE SOSA
P. O. BOX 39
OTTER ROCK, OR 97369

Michael has been a QL supporter for many years and has written many articles and a book on the subject. Let's see if we can pay him back in this small way!

SUBMISSION REQUIREMENTS-----
Upon reading several recent news-letters from around the country, I find that one of the reasons given for readers not submitting articles or programs for publication is that it seems that our newsletter editors

have been putting certain "require-ments" on how they will accept sub-missions. It seems to me that, if they want TS users to submit material, then they should be happy to receive material IN ANY FORM! As former editor of this newsletter and knowing the current editor rather well, I can say that THE PLOTTER has never set any such restrictions. We will accept printed material, disk based or cassette based material and now, even ASCII files on MS-DOS disks! We have asked that we not receive hand-written material, as this can be a problem in some cases. I don't think that this is too restrictive, do you? So dig out your typewriter, turn on your 2068/2040 or your IBM clone and put your thoughts, ideas programs, reviews or just your observations down for us to publish. If it's important to you, chances are it will be import-andt to others.

OLIVETTI INK JET USERS!--

ATTENTION!!! --- Are you looking for ink cartridges for your printer?? If so, you're in luck! Here are a couple of phone numbers that may be of help to you:

OLIVETTI CUSTOMER SERVICE:

1-800-524-0799

OLIVETTI TECHNICAL SUPPORT:

1-800-222-2310

The ink cartridges are $13.12/4 and if you order 4 or more paks, you get free freight! I hope that this helps someone.

RMG PC SHAREWARE LIBRARY GROWS!-

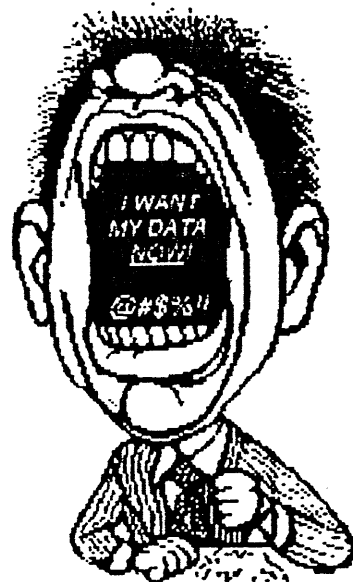NOW OVER 250 MEGABYTES OF MS-DOS AND RELATED SHAREWARE AND PD PROGRAMS! Over 10,000 programs! All are at your disposal for only $3.50 for the first disk and $2 for each additional disk-up to 10-and $1.50 for each one over 10 on the same order. Shipping is $2 for the first disk or $5 for 10 or more. For a listing of titles and descriptions on disk, the cost is $4 postpaid. Just write or call RMG for more information.

THE BEST OF THE PLOTTER--

May be delayed a bit. We are a small group and when some members are un-available to help out with the work involved in putting a project like this together, the time involved stretches out. We were hoping to have the first run ready for shipment sometime in October or early November but it is beginning to look like that will be pushed back a month or more. We will not quit the project, but hope that those of you who are interested in the book and/or disks will not give up on us. We think that you will be pleased with the result. Stay tuned for further developments.

That's it for now!

See you next time. . .

CONVERT THAT OLD AMDEK 3 TO A 3.5

By: Rod Gowen

How many of you have an old Amdek III 3" disk drive set stored away because you can't get anything for it? They seem to have a market value of about $25 these days as they were originally produced. This is mainly due to the fact that the diskettes are hard to find and relatively expensive to buy at $4-5 each. Wouldn't you rather have a 3.5" drive set and pay $.50-60 per disk instead--AND--QUADRUPLE your directly accessible storage space in the process? Well you can!

That's right! With the 3" SSDD drives you have direct access to only 360K of disk space without turning a disk over. You have a total capacity of 720K by using both disks and turning both of them over manually. With a pair of 3.5" 720K drives you have a total capacity of 1440K ALL AT ONCE! No disk switching and less than 1/6th the price.

With several sets of the Amdek drives in my inventory, I was glad to find, that, by using the method described in this article, they can be converted to the higher capacity, more efficient 3.5" 720K drives.

Don't be afraid, this project requires absolutely no wiring or soldering! If you can unplug and replug a couple of cables and remove and replace a few screws, then you can handle this project! What do you say? Shall we begin?

Tools required: Phillips screwdriver

Materials needed: 1 set of Amdek III 3" drives, 1 or more 720K 3.5" drives, 6 to 10" of small plumber's strap (the metal strap with uniform holes in it) and a few 6/32 bolts and nuts. The 720K drives are available from RMG Enterprises and other sources for around $60-70 new and $50-60 used. Check around.

STEP 1: REMOVE 3" DRIVES

Your Amdek III now looks like Figure A. There are 5 screws holding the metal cover on the case--2 on each side panel and 1 on the back just to the right of the cable slot as you are facing the rear panel. Remove these 5 screws and you can slide the cover up and off.
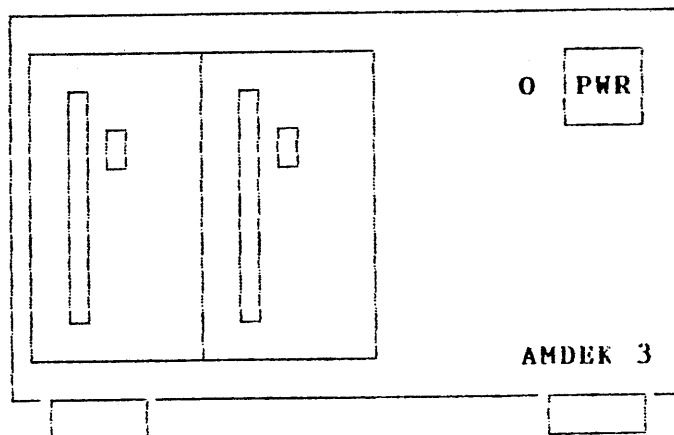

Figure A

Now that the cover is off, you will be able to see the 2 power plugs and the ribbon cable attached to the 2 3" drives. Gently disconnect each of these connectors. Remove the 4 screws that hold the 2 drives in the case. They are located on the top of the metal frame that holds the drives. Now, gently push the drives out the front of the case. Look at the rear of the 3" drives and note the edge connectors for the ribbon cable. These are just plugged onto the 34 pin "pin-type" connectors that are found on all 3" and 3.5" drives. Remove the card-edge adaptors for use on your new 3.5" drives, taking note of which side is the #1 pin.

Now you can take the 3.5" drive(s) and test fit them into the Amdek case to see how it will all look. There are a couple of ways to go from here--you can mark and drill holes in the left side of the drive bay (as you face the front of the case), or you can do as I did and use some small hole metal strapping like that used in the installation of automotive audio systems. This thin metal strap that has holes approximately every 1/4" down the center, is formed around the drive(s) and the holes line up to allow the screws to be inserted both into the drive(s) and into the case. When you are done, you will have what looks like Figure B. I used a 3.5" filler plate from an IBM compatible case to fill the upper half of the drive bay. As you can see, the bay will hold more than 2 drives. I see no reason why you cannot put 4 drives into the case with the use of a power cable splitter and adding 2 edge connectors to the ribbon cable.
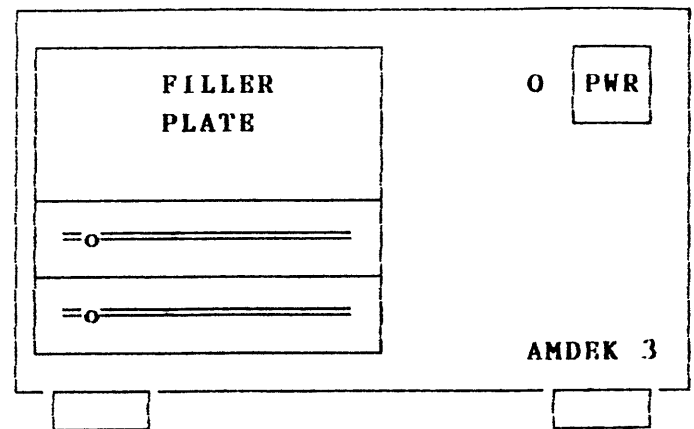

FIGURE B

This project has been carried out by several of my customers so far and seems to work out well. If you have any questions, do not write to THE PLOTTER, but to RMG ENTERPRISES at the same address. Or you can call us any Tue-Sat between the hours of 6AM and 3PM Pacific time. You can even FAX us 24 hours a day at: 503/655-4116. We also have a good supply of the Amdek III drives in stock.

If you enjoyed this little project/ article, please let us know. We may be able to come up with some others. We would like ideas for projects.

(NOTICE: WE ASSUME ABSOLUTELY NO RESPONSIBILITY FOR ANY DAMAGE TO YOUR DRIVES OR OTHER HARDWARE IF YOU UNDERTAKE TO PURSUE THIS PROJECT!)

```
       DISK SPEED MEASUREMENT

    The drive you select will be
tested for acceleration and
sustained speed.
    Before proceeding, place a
disk in your selected drive and
close its door.

Turn    RPM
  1    295.47
  2    296.72
  3    297.22
  4    297.05
  5    297.44
  6    296.94
  7    297.22
  8    296.94


    PRESS ANY KEY TO CONTINUE
```

```
  5 RESTORE 101: FOR n=39936 TO
40007: READ w: POKE n,w: NEXT n
  101 DATA 243,33,72,156,1,143,0,
62,208,237,121,16,-2,205,56,156,
205,56,156,48,-5,205,56,156,56,-
5,6,8,197,17,0,0,205,51,156,48,-
5,205,51,156,56,-5,115,35,114,35
,193,16,-21,251,201
  102 DATA 6,1,16,-2,19,62,127,21
9,254,246,224,60,40,2,207,20,237
,120,31,31,201,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0
  500 CLS : PRINT "  WIDJUP DISK
TESTING SERVICES       DISK SPEE
D MEASUREMENT","",""
  520 PRINT '"   The drive you se
lect will be   tested for acceler
ation and      sustained speed."'
"   Before proceeding, place a
  disk in your selected drive an
d close its door."
  530 INPUT "Which drive? (O TO 3
) ";w
  531 OUT 183,0: PAUSE 60: OUT 18
3,2^W: OUT 143,0
  532 LET w=USR 39936
  533 INK 1: PLOT 100,81: DRAW 15
0,0: PLOT 100,72: DRAW 150,0: PL
OT 100,63: DRAW 150,0: INK 0
  534 PRINT '"Turn  RPM": ON ERR
GO TO 548: FOR n=40008 TO 40023
STEP 2: LET w=PEEK n+256*PEEK (n
+1)
  535 LET w$=STR$ (1605000/w)
  536 IF LEN w$>6 THEN LET w$=w$(
TO 6)
  537 PRINT "  ";n/2-20003;"  ";w
$
  538 INK 1: PLOT 8*(n-39994),70+
2.5*(VAL w$-300): DRAW 2,0: DRAW
0,4: DRAW -4,0: DRAW 0,-4: DRAW
2,0: INK 0
  548 NEXT n: ON ERR RESET
  550 PRINT ''"       PRESS ANY KEY
TO CONTINUE   ": PAUSE 0: GO TO
500
9999 CLEAR : SAVE //"DISKSPEED"
LINE 1
```

TO FAX OR NOT TO FAX

First there was the facsimile, or 'fax' machine. Now there's enhanced fax technology.

Even though facsimile technology has been in limited use for over fifty years, it has only been within the last few years that its popularity has grown. In 1991 alone enough pages were faxed in the U.S. to equal 11,700,000 copies of *War And Peace.*

The reason for recent growth is that the equipment, technology and speed have been greatly improved. Computer technology has enabled the fax machine of today to "talk" at very high speeds with other fax machines as they send and receive information. With faster and better quality transmission its popularity has grown immensely. And, with increased usage, the price of fax machines has come down tremendously during recent years.

Telephones enable people to talk with each other. However, fax machines can transmit and receive letters, charts, detailed reports and many other types of printed information. The facsimile principle is similar to two copiers separated by a telephone line of any length. When an original is inserted into the "calling" fax machine, a facsimile, or copy, of the original comes out of the "called" fax machine.

Enhanced facsimile service features include a personal mailbox, broadcast capability, no-busy service and management reports. The password-accessible mailbox offers customers security as well as mobility. Using a touchtone phone, customers in or away from their offices can send documents stored in the mailbox to standard fax machines or personal computers equipped with fax boards. In addition, customers can choose to be alerted by fax, phone call or

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pager that faxes are waiting.

Customers can also use enhanced fax to broadcast a fax to multiple locations. The broadcast feature includes a detailed status report of each broadcast operation.

The management report feature, which also requires a small piece of hardware, helps customers keep track of total fax usage by machine, department, or client.

Most businesses and many homes have a separate telephone line dedicated exclusevely to the use of the fax machine. However, special equipment is available that allows one telephone line to serve both a telephone and a fax machine by directing the call to the appropriate equipment.

Another popular fax feature, similar to voice mail, is fax mail or messaging. When you call in your voice messages, you can also access your fax messages. The system tells you how many messages you have, prompts the user to push one digit on their push-button phone to hear their voice messages and another button to deliver fax messages. It can also forward voice and fax messages to others on the network.

Transaction processing employs voice and fax response to perform and confirm a transaction. For example, you can order something at your convience - not just during business hours - and have the reciept faxed to you. Another example is the use of fax technology to expedite the processing of loan and credit applications.

Fax-on-demand describes an information retrieval process. Customers call the fax-on-demand system and select the documents they wish to receive by using their touchtone phone. The system then faxes them the information.

Businesses are saving time and money using fax-on-demand systems as an alternative to mail or manually faxing all manner of printed material. These include, but not limited to, product literature, price lists and specification sheets. These systems work well for businesses since potential customers are able to recieve information while their interest is high and, by providing this information immediateely, companies are able to reduce the sales time cycle.

Fax-on-demand also saves businesses money. Not only can they supply instant information to customers, they can make customers pay for it, thereby saving money on phone bills and postage costs. Documents stored in the system can be updated as needed, eliminating the need to send out old sales brochures because they were printed and need to be used up.

Fax machines, and the many existing - as well as yet undreamed of applications available to users are just one more example of how telecommunications enhances our day-to-day lives.

SAYINGS

No man is responsible for his father. That is entirely his mother's affair.
----Margaret Turnbull

When choosing between two evils, I always like to try the one I've never tried before.
----May West

"I was gratified to be able to answer promptly. I said I didn't know."
----Mark Twain

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—NOTICE—

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FREE SUBSCRIPTION WITH PAID CCAT/S MEMBERSHIP—$20.00/YR

PLACE YOUR AD HERE

AD RATES
****
1 FOUR LINE CLASSIFIED FREE WITH MEMBERSHIP

$	.50	/ LINE
$	5.00	/ 1/4 PAGE
$	8.00	/ 1/2 PAGE
$	15.00	/ FULL PAGE

ALL AD COPY MUST BE IN BY THE 10TH OF THE MONTH PRIOR TO THE MONTH AD IS TO RUN.

CCAT/S
1419 1/2 7TH Street
Oregon City, OR 97045

CANBY, OR
OCT 7
PM
1992

Explorer of California 1542
29 USA
Juan Rodríguez
CABRILLO

EXPIRES: 12/92
HOWARD CHEGWIDDEN
2 STEPHEN ST.
DOVER, NJ 07801
ML/PD:12/92